

BookletChart™

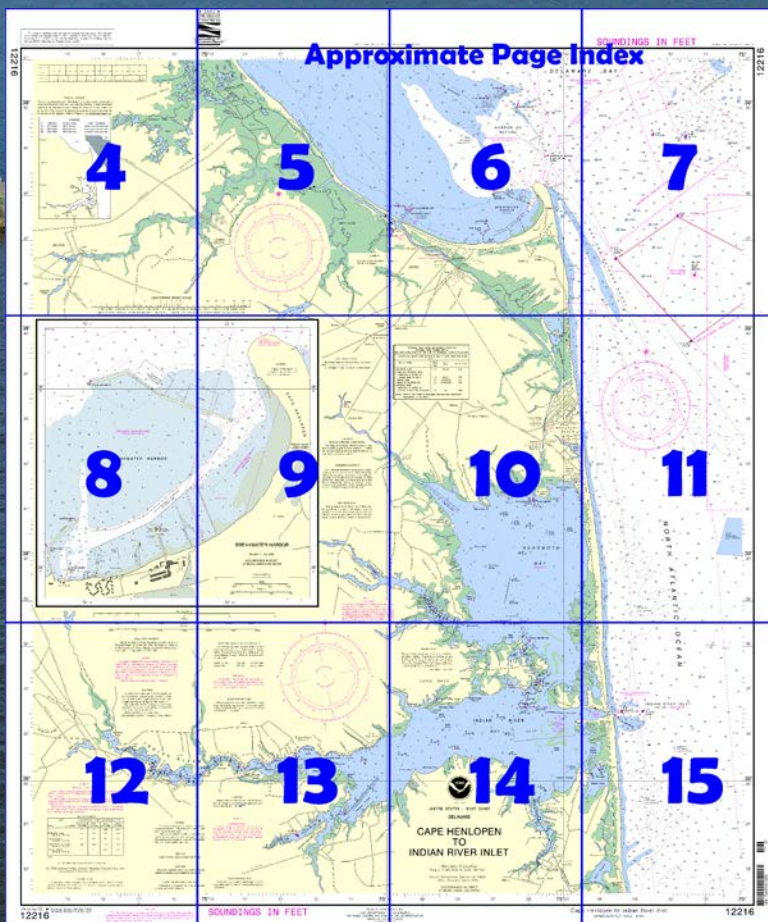
Cape Henlopen to Indian River Inlet NOAA Chart 12216



A reduced-scale NOAA nautical chart for small boaters
When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=12216>



(Selected Excerpts from Coast Pilot)

The Cape May-Lewes Ferry crosses the channel in Delaware Bay northward of Cape Henlopen.

In bad weather small craft anchor behind the breakwaters north and west of Cape Henlopen.

Harbor of Refuge is behind the breakwater that begins 0.7 mile north of Cape Henlopen and extends north-northwestward. **Harbor of Refuge Light**, (38°48.9'N., 75°05.6'W.), 72 feet above the water, is shown from a white

conical tower on a cylindrical substructure near the south end of the breakwater; the station has a fog signal. A light marks the breakwater near its northern end.

The harbor has depths of 17 to 70 feet between the breakwater and a shoal ridge, 8 to 12 feet deep, 1 mile to the southwestward. The entrance from across The Shears has depths of 10 feet or less. Harbor of Refuge affords good protection during easterly gales.

Breakwater Harbor is excellent for light-draft vessels in all weather except heavy northwesterly gales and even then affords considerable protection.

Two channels lead through Breakwater Harbor. The channel from the northeast and the ferry basin had depths of 10 feet. The channel from the north had a depth of 10 feet.

Roosevelt Inlet. The inlet is protected by jetties that are awash at low water; each marked by a light on its outer end. The channel is marked by the jetty lights and a **213°** lighted range. The current velocity is 0.9 knot in Roosevelt Inlet. Gasoline and diesel fuel can be obtained at a yacht club on the northeast side.

Broadkill River is entered by an inside passage that extends 2 miles from the Roosevelt Inlet jetties to the old mouth of the river.

Twin bridges over Broadkill River have a clearance of 18 feet. Above the bridges, the river has numerous snags and much floating debris.

The **Lewes and Rehoboth Canal** extends 8 miles from Roosevelt Inlet to Rehoboth Bay. The entrance to Rehoboth Bay is between marked, submerged, stone jetties southwest of Dewey Beach. The **speed limit** is 4 miles per hour in the canal.

Bridges and cables.—The U.S. Route 9 Business highway bridge over the canal at Lewes has a bascule span with a clearance of 15 feet. The overhead power cable to the west of the bridge has a clearance of 68 feet. The Delaware Coast Line railroad bridge, 0.2 mile southeastward of the highway bridge, has a 46-foot swing span with a clearance of 10 feet; the span remains in the open position except for infrequent passage of trains; the overhead cable at the bridge has a clearance of 68 feet. The U.S. Route 9 fixed highway bridge 100 yards southeastward of the railroad bridge has a 46-foot span with a clearance of 35 feet.

These bridges restrict the normal water flow in the canal and produce very strong currents. Small craft should proceed with caution in these areas.

The State Route 1 Alternate highway bridge over the canal at Rehoboth Beach, 6.5 miles from Roosevelt Inlet, has a 49-foot bascule span with a clearance of 16 feet; the overhead power cables on the north side of the bridge have a least clearance of 55 feet. The State Route 1 fixed highway bridge, 0.3 mile farther southward, has a clearance of 35 feet. The overhead power cables on the north and south side of the bridge have a least clearance of 55 feet. (See **117.1 through 117.59 and 117.239**, chapter 2, for drawbridge regulations.)

A channel leads from Indian River Inlet through Indian River Bay and up Indian River to Millsboro, 12 miles above the inlet. The channel from the entrance to Buoy 20 in Indian River Bay is subject to continual change due to severe shoaling. The channel is marked by uncharted buoys that are frequently shifted to mark the best water. The channel to Millsboro is marked by daybeacons and seasonal buoys.

Currents.—The current velocity is about 2 knots; caution is necessary, because the buoys sometimes tow under.

The fixed highway bridge over Indian River Inlet has a clearance of 35 feet for a midwidth of 100 feet or 32 feet for a width of 200 feet. The stub ends of a former drawbridge, now used as fishing piers, are close westward of the bridge. An overhead power cable with a clearance of 66 feet crosses the inlet about 100 yards westward of the bridge.

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Norfolk

Commander

5th CG District

Norfolk, VA

(575) 398-6231

Table of Selected Chart Notes

CAUTION

Cape Henlopen is steadily building out to the northwest.

NOTE F

Roosevelt Inlet Channel is subject to frequent changes.

HEIGHTS

Heights in feet above Mean High Water.

CAUTION

BASCULE BRIDGE CLEARANCES

For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

HORIZONTAL DATUM

The horizontal reference datum for this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to World Geodetic System of 1984 (WGS 84). Geodetic positions referred to the North American Datum of 1927 must be corrected an average of 0.407" northward and 1.333" eastward to agree with this chart.


CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

RACING BUOYS

Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

CAUTION

Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus: 

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

For Symbols and Abbreviations see Chart No. 1

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CAUTION


Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

○ (Accurate location) ○ (Approximate location)

FISH TRAP AREAS

Boundary lines of fish trap areas are shown thus:  Submerged piling may exist in these areas.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

Fixed and floating obstructions, some submerged, may exist within the magenta tinted bridge construction area. Mariners are advised to proceed with caution.

Mercator Projection
Scale 1:40,000 at Lat. 38°42'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Salisbury, MD	KEC-92	162.475 MHz
Lewes, DE	WXJ-94	162.550 MHz

INDIAN RIVER

The controlling depth was 15 feet for a width of 200 feet in Indian River Inlet to the fixed bridge. Position of aids 4 to 28 mark a shifting channel from the fixed bridge to Buoy 30. Buoys 4 to 17 are not charted. The controlling depth was 1 foot from Buoy 19 to Millsboro.

Sep 1995 - Jul 2000

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.


HURRICANES AND TROPICAL STORMS

Hurricanes, tropical storms and other major storms may cause considerable damage to marine structures, aids to navigation and moored vessels, resulting in submerged debris in unknown locations.

Charted soundings, channel depths and shoreline may not reflect actual conditions following these storms. Fixed aids to navigation may have been damaged or destroyed. Buoys may have been moved from their charted positions, damaged, sunk, extinguished or otherwise made inoperative. Mariners should not rely upon the position or operation of an aid to navigation. Wrecks and submerged obstructions may have been displaced from charted locations. Pipelines may have become uncovered or moved.

Mariners are urged to exercise extreme caution and are requested to report aids to navigation discrepancies and hazards to navigation to the nearest United States Coast Guard unit.

ROOSEVELT INLET, LEWES AND REHOBOTH CANAL AND BROADKILL RIVER CHANNEL DEPTHS TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO AUG 2011			
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)			
NAME OF CHANNEL	DEPTH MLLW (FEET)	WIDTH (FEET)	DATE OF SURVEY
ROOSEVELT INLET	5.4	MID 100	8-11
LEWES AND REHOBOTH CANAL			
INNER END OF JETTIES TO TURNING BASIN AT LEWES	7.0	MID 50	4-11
TURNING BASIN	6.3	MID 100-150	4-11
THENCE TO REHOBOTH BAY	4.0	CENTERLINE	8-84
BROADKILL RIVER			
INNER END OF JETTIES TO A POINT AT 38° 47' 28"N, 75° 09' 49"W	7.0	100	4-11
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGING CONDITIONS SUBSEQUENT TO THE ABOVE			

COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: 

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

TIDAL INFORMATION

PLACE		Height referred to datum of soundings (MLLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Rehoboth Beach	(38°43'N/75°05'W)	4.4	4.1	0.2
Breakwater Harbor	(38°47'N/75°07'W)	4.7	4.2	0.2

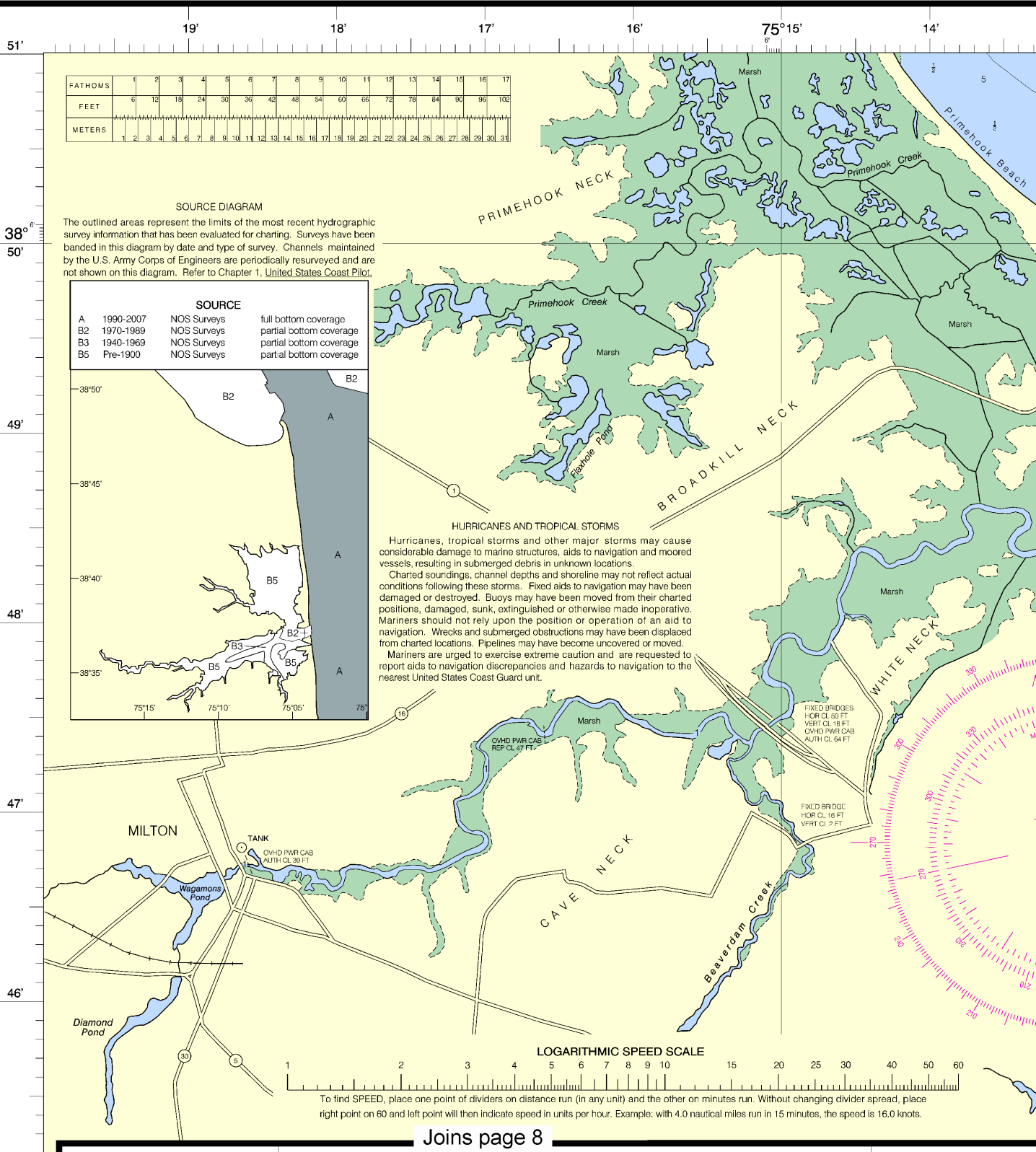
Dashes (---) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from <http://tidesandcurrents.noaa.gov>.
(May 2012)

12216

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

NOTE X

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.



Joins page 8

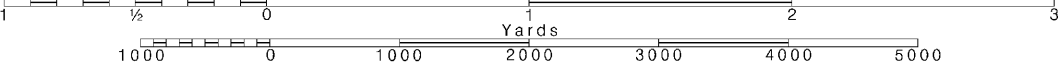
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Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:40,000 Nautical Miles

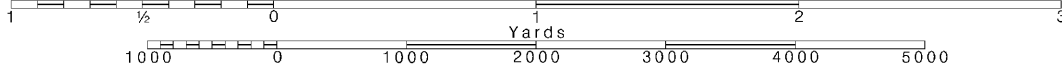
See Note on page 5.



Formerly C&GS 411, 1st Ed., Jan. 1954 G-1953-837 KAPP 555



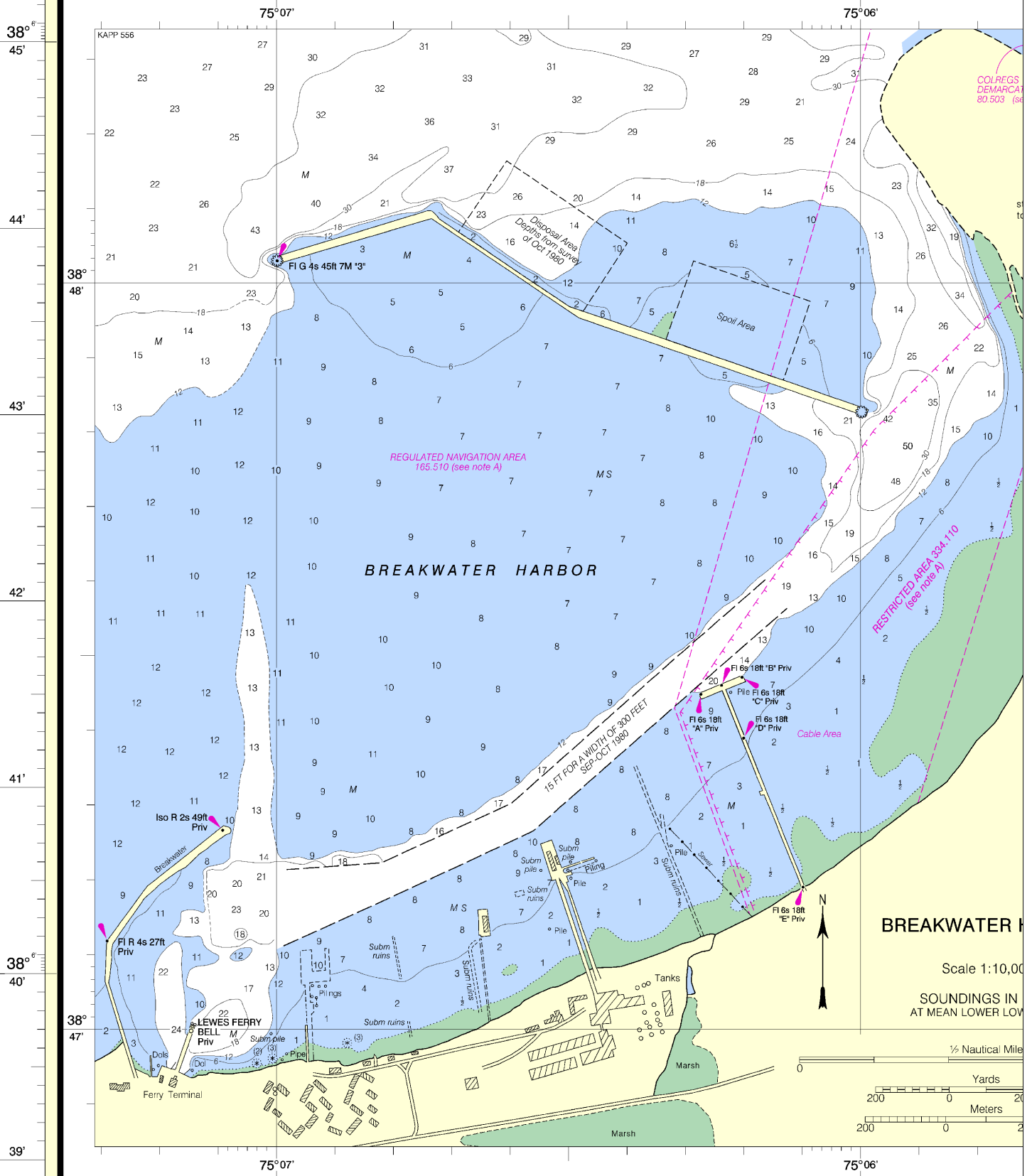
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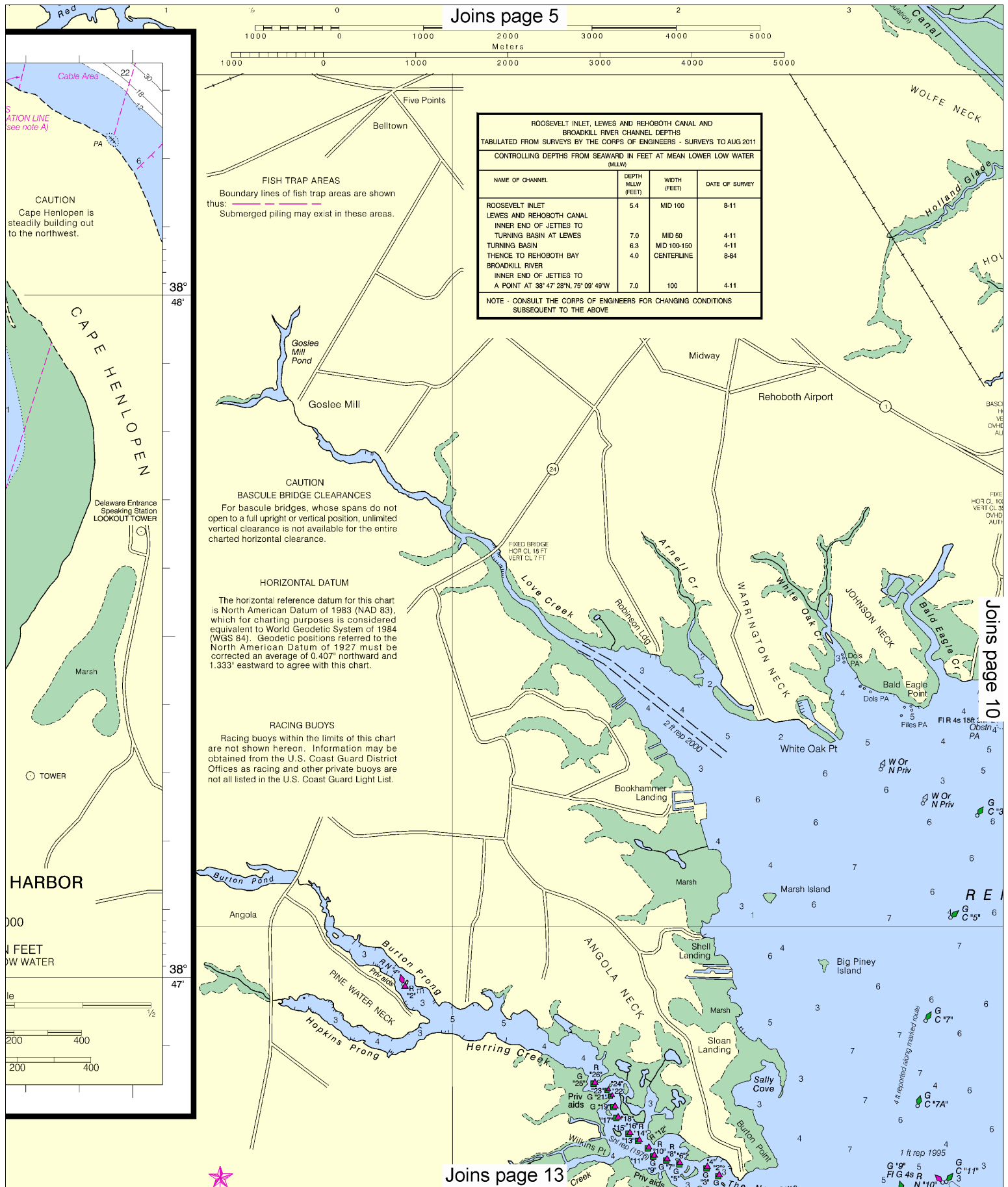


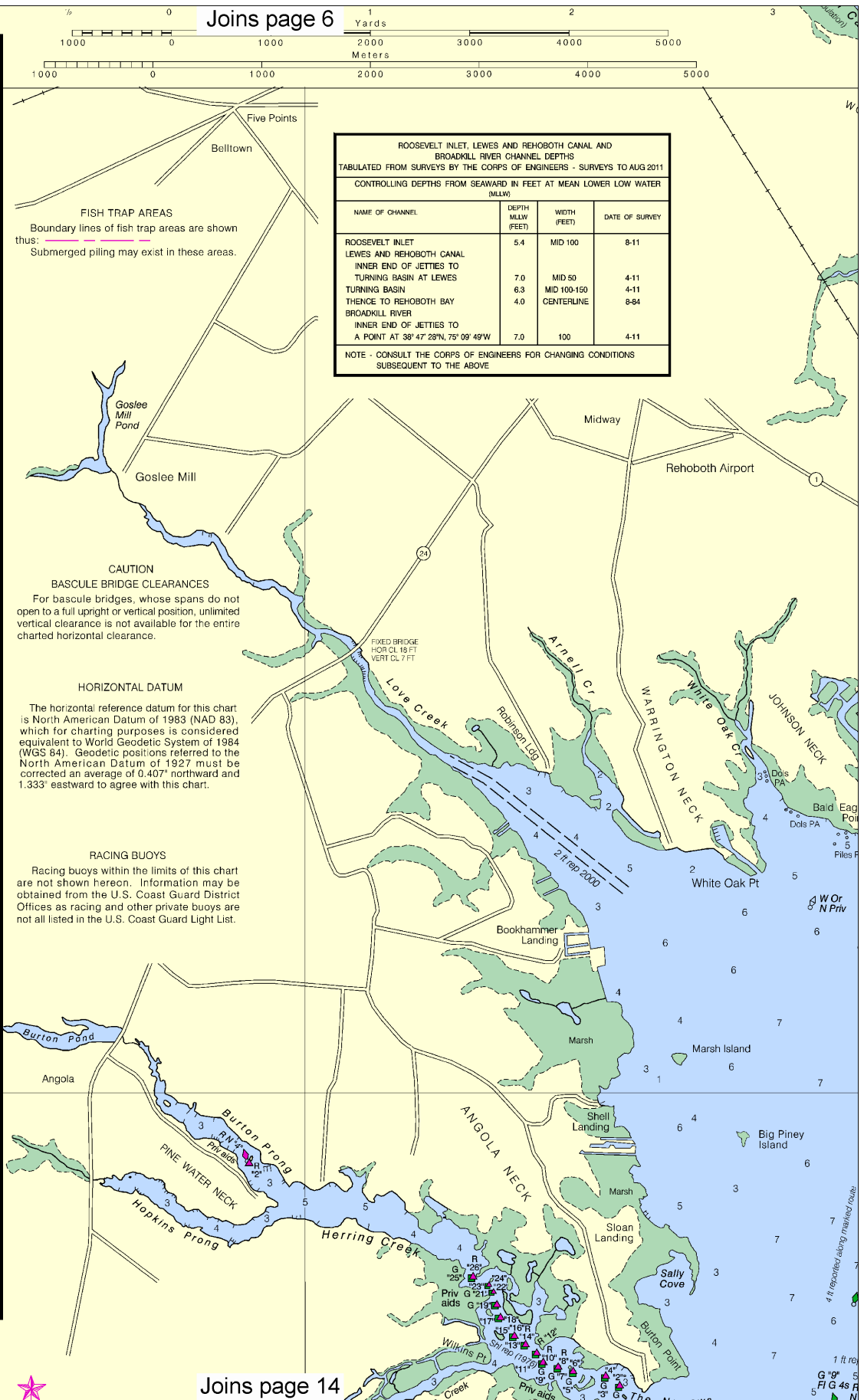
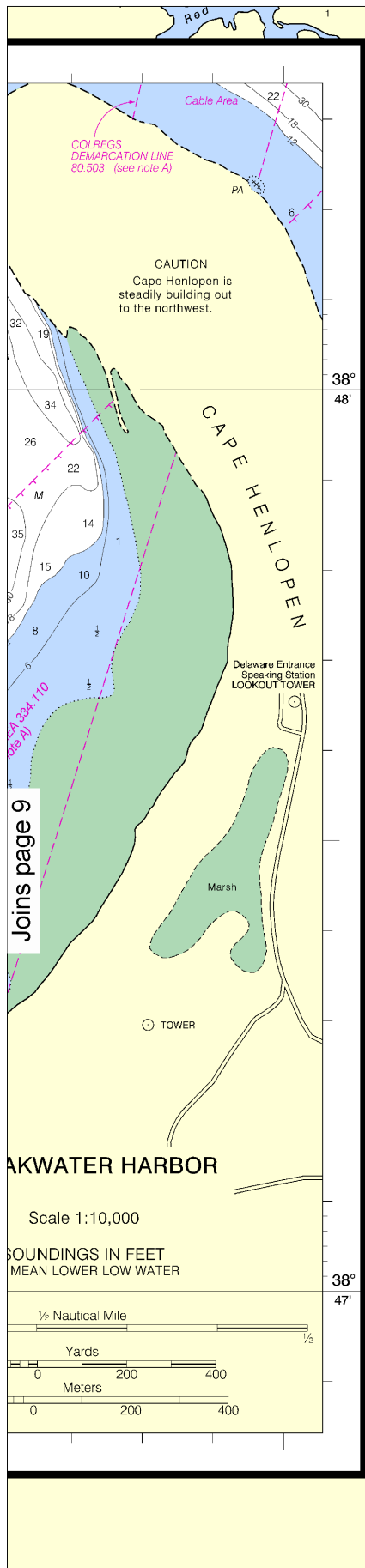
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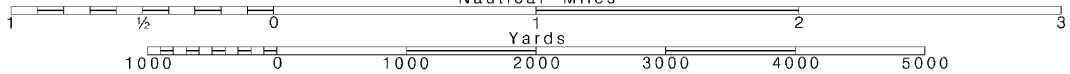
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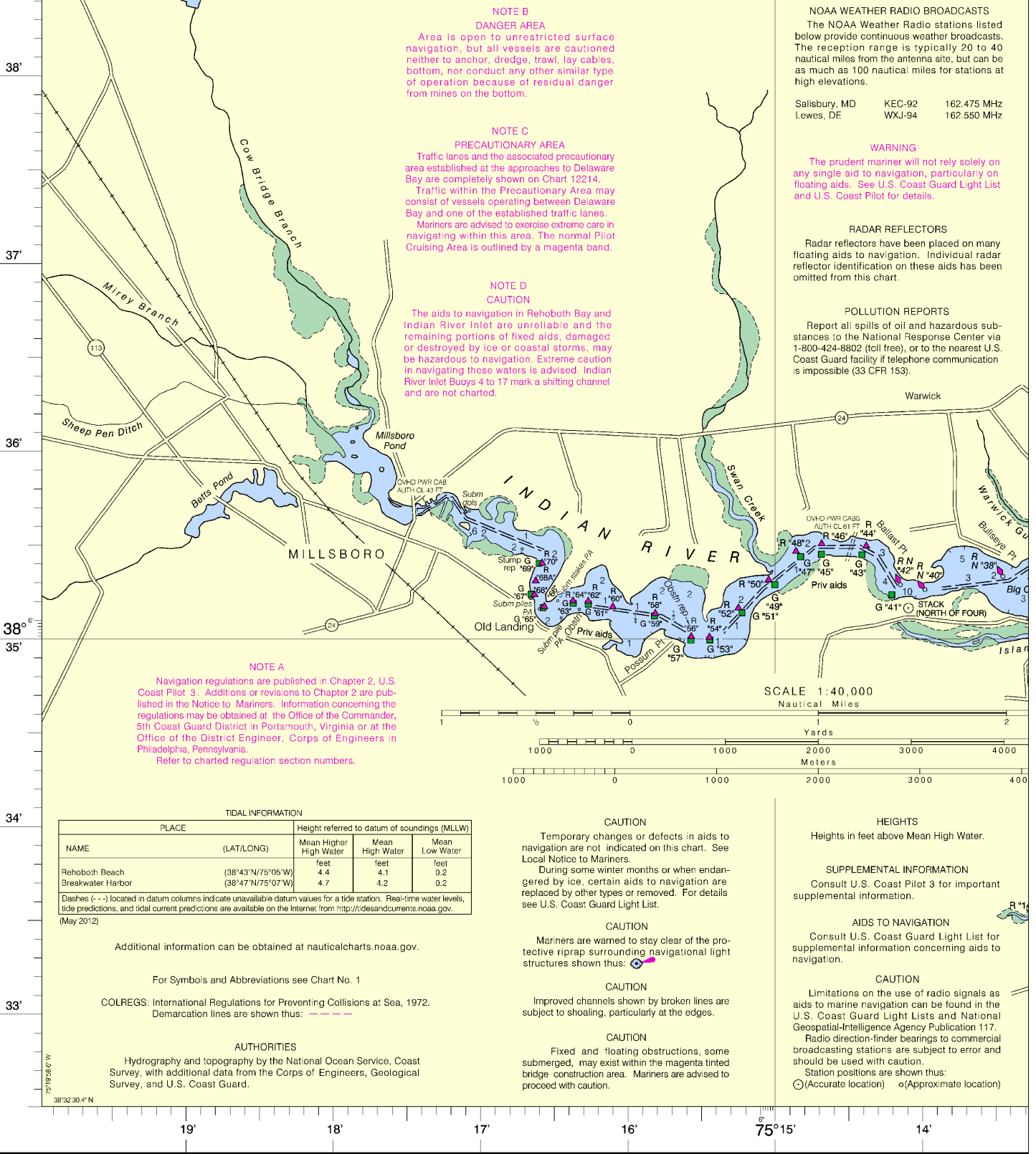
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SCALE 1:40,000
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See Note on page 5.





29th Ed., Jun./12
12216

Corrected through NM Jun. 30/12
Corrected through LNM Jun. 26/12

CAUTION
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

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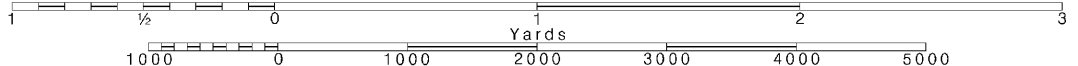
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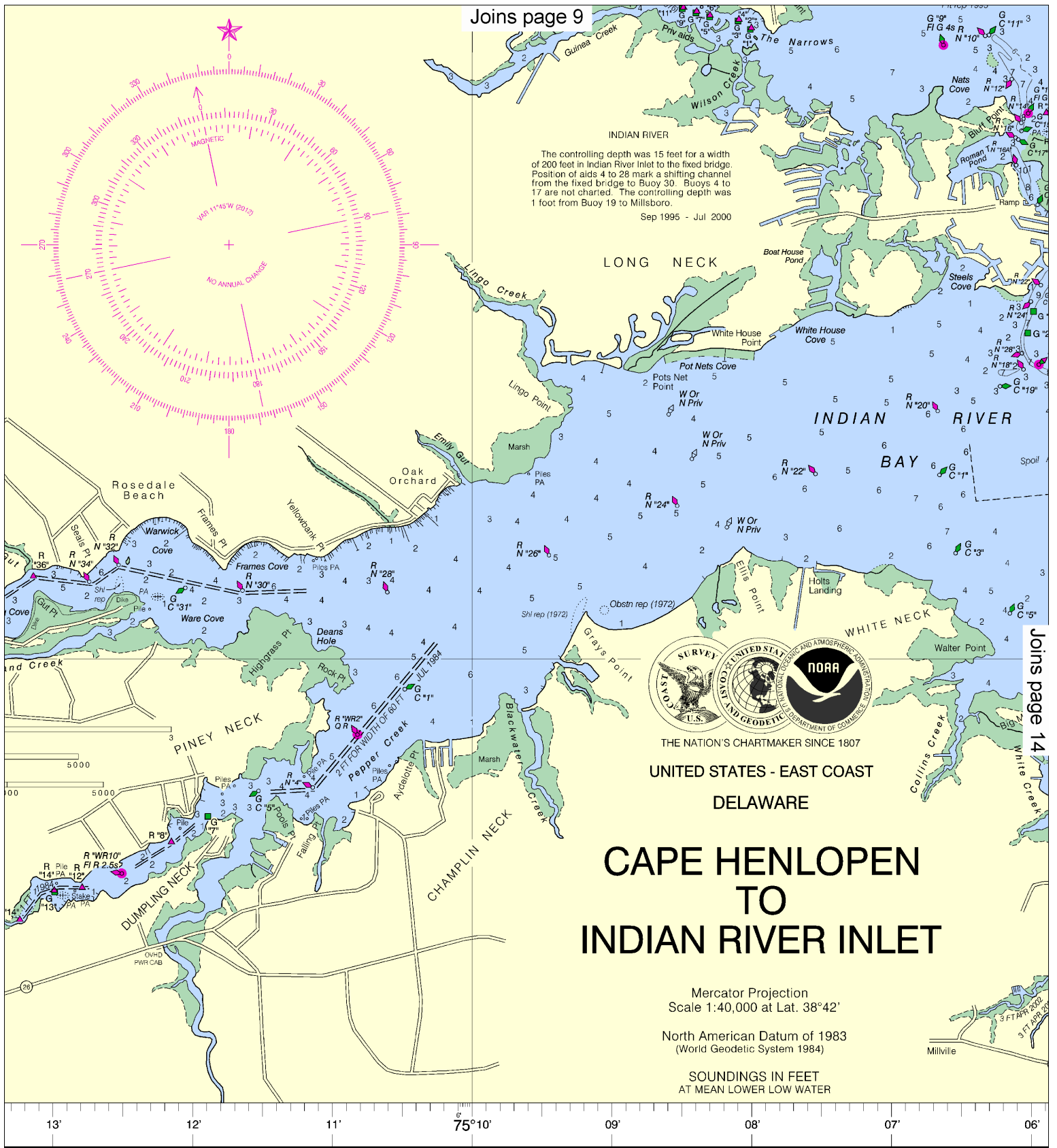
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SCALE 1:40,000
Nautical Miles

See Note on page 5.



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SOUNDINGS IN FEET

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Joins page 10

ROADCASTS
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Joins page 13

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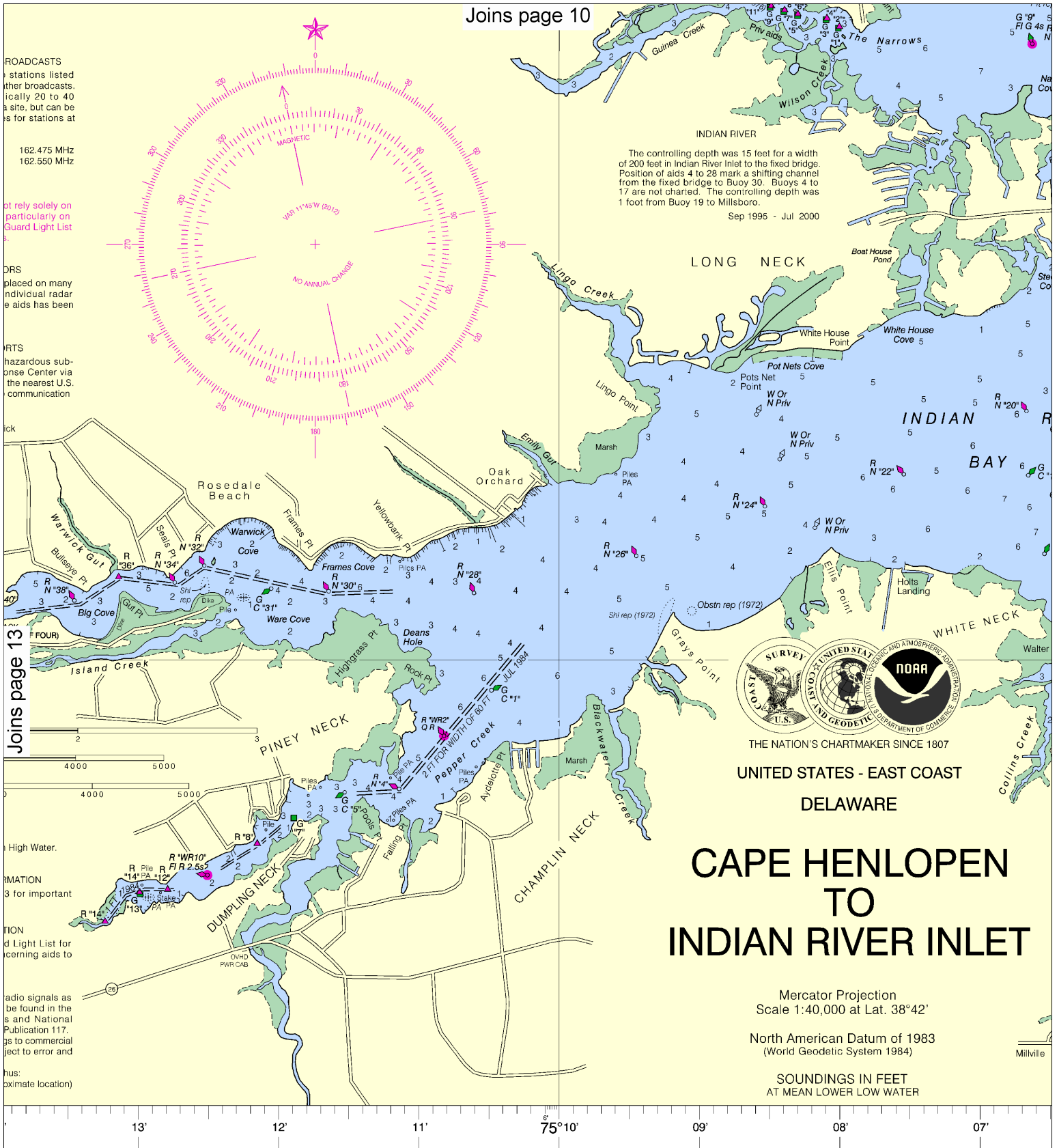
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Sep 1995 - Jul 2000



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - EAST COAST

DELAWARE

CAPE HENLOPEN TO INDIAN RIVER INLET

Mercator Projection
Scale 1:40,000 at Lat. 38°42'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

SOUNDINGS IN FEET

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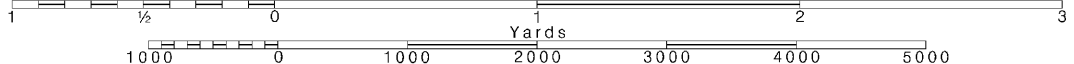
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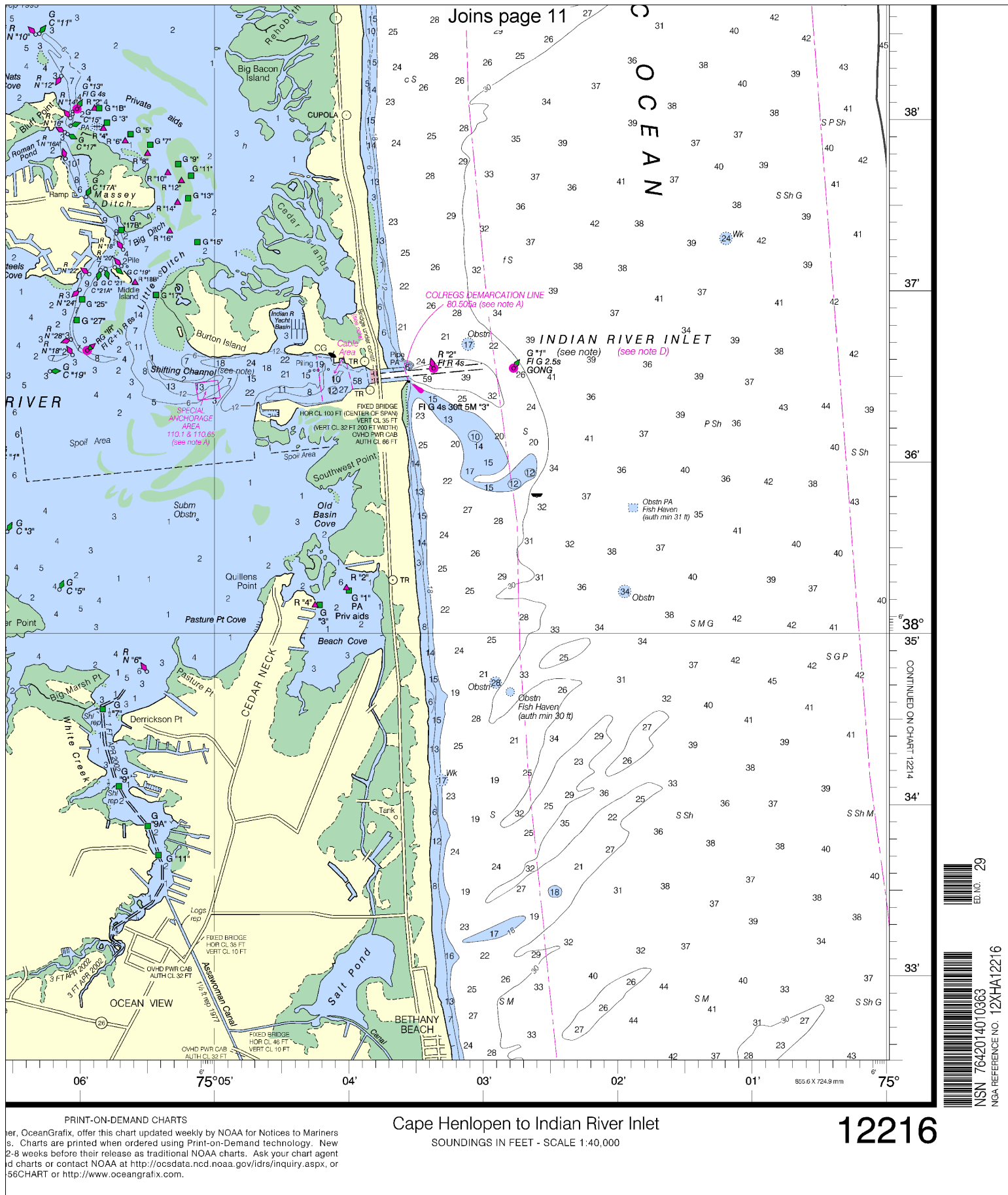
Note: Chart grid
lines are aligned
with true north.

Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.







VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

Quick References

Nautical chart related products and information	—	http://www.nauticalcharts.noaa.gov
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Chart and chart related inquiries and comments	—	http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs
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Marine Forecasts	—	http://www.nws.noaa.gov/om/marine/home.htm
National Data Buoy Center	—	http://www.ndbc.noaa.gov/
NowCoast web portal for coastal conditions	—	http://www.nowcoast.noaa.gov/
National Weather Service	—	http://www.weather.gov/
National Hurricane Center	—	http://www.nhc.noaa.gov/
Pacific Tsunami Warning Center	—	http://ptwc.weather.gov/
Contact Us	—	http://www.nauticalcharts.noaa.gov/staff/contact.htm



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NOAA's Office of Coast Survey



The Nation's Chartmaker